

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) Anionic hydrogel matrix obtained by chemical reticulation by means of irradiation of polymers suitably derivatised with photoreticulable groups, wherein the photoreticulable groups are derived from the insertion of glycidyl methacrylate (GMA) and methacrylic anhydride (MA) in the side chain of PHEA in the presence of acid comonomers.

2-4. Cancelled.

5. (Original) Matrix according to claim 1, in which the acid comonomer is selected from methacrylic acid or acrylic acid.

6. (Original) Matrix according to claim 1, in which the irradiation agents are selected from the group consisting of gamma rays, beta rays and ultraviolet radiation.

7. (Original) Matrix according to claim 1, in the form of nanoparticles, microparticles, gels, films, cylinders or sponges, the preferred form being microparticles.

8. (Previously Presented) Pharmaceutical composition consisting of a matrix according to claim 1 and one or more active ingredients.

9. (Original) Composition according to claim 8, containing additionally one or more pharmaceutically acceptable excipients.

10. (Original) Composition according to claim 9, in which the excipients are selected from the group consisting of bioadhesives, chitosans, polyacrylamides, natural or synthetic rubbers and acrylic acid polymers.

11. (Original) Composition according to claim 8, in which said active ingredients are selected from the group consisting of

- analgesic agents, such as acetaminophen, phenacetin and sodium salicylate;
- antitussive agents, such as dextromethorphan and codeine phosphate;
- bronchodilators, such as albuterol and procaterol;
- antipsychotics, such as haloperidol and chlorpromazine;
- antihypertensive agents and coronary dilators, such as mono- and dinitrate isosorbide and captopril;
- selective β_2 antagonists, such as salbutamol, terbutaline, ephedrine, and orciprenaline sulphate;
- calcium antagonists, such as nifedipine, nicardipine, diltiazem and verapamil;
- antiparkinson drugs, such as pergolide, carbidopa and levodopa;
- hormones;
- non-steroidal and steroidal anti-inflammatory drugs, such as ketoprofene, ibuprofene, diclofenac, diflunisal, piroxicam, naproxene, ketorolac, nimesulide, budesonide, tiaprofenic acid, mesalazine (5-aminosalicylic acid) cortisone, hydrocortisone, betamethasone and prednisone;
- antihistamines, such as terfenadine and loratadine;
- antidiarrhoeal and intestinal anti-inflammatory agents such as loperamide, 5-aminosalicylic acid, olsalazine, sulfasalazine and budesonide;
- spasmolytics, such as octylonium bromide;

- anxiolytics, such as chlordiazepoxides, oxazepam, medazepam, alprazolam, donazepam and lorazepam;
- oral antidiabetic agents, such as glipizide, methformin, phenphormin, gliclazide and glibenclamide;
- cathartics, such as bisacodil and sodium picosulphate;
- antiepileptic agents, such as valproate, carbamazepine, phenytoin and gabapentin;
- anticancer agents;
- disinfectants of the oral cavity or antimicrobials, such as benzalkonium chloride, cetylpyridinium chloride or tibezoneium iodide, and a number of aminoderivatives such as benzidamine and chlorhexidine as well as their salts and derivatives;
- sodium fluoride;
- cardioactive agents;
- antihistamines;
- L-carnitine and/or one or more alkanoyl L-carnitines, or one of their pharmaceutically acceptable salts.

12. (Original) Composition according to claim 11, in which the alkanoyl, straight or branched, has 2-6 carbon atoms, and is selected from the group consisting of acetyl, propionyl, butyryl, valeryl or isovaleryl L-carnitine.

13. (Original) Composition according to claim 11, in which said pharmaceutically acceptable salt of L-carnitine or of the alkanoyl L-carnitines is selected from the group consisting of chloride, bromide, orotate, aspartate, acid aspartate, acid citrate, magnesium citrate,

phosphate, acid phosphate, fumarate and acid fumarate, magnesium fumarate, lactate, malcate, and acid malcate, oxalate, acid oxalate, pamoate, acid pamoate, sulphate, acid sulphate, glucose phosphate, tartrate and acid tartrate, glycerophosphate, mucate, magnesium tartrate, 2-amino-ethane sulphonate, magnesium 2-amino-ethane sulphonate, methane sulphonate, choline tartrate, trichloroacetate, and trifluoroacetate.

14. (Previously Presented) Composition according to claim 8 for oral use.

15. (Previously Presented) Method of treating a patient or an animal in need thereof comprising administering the composition according to claim 8.

16. (Currently Amended) Method of treating cardiovascular diseases, tumors, central and peripheral nervous system diseases, or intestinal diseases comprising for
preparing a medicine ~~comprising administering to a patient or an animal in need~~
~~thereof with~~ the composition according to claim 8, and
administering said medicine to a patient or animal in need thereof for the treatment of
~~cardiovascular diseases, tumors, central and peripheral nervous system diseases,~~
~~or intestinal diseases.~~

17. (Previously Presented) Method according to claim 16, in which the intestinal disease is chronic ulcerative colitis or Crohn's disease.

18. (Previously Presented) Method according to claim 17, in which the drug useful for the treatment of chronic intestinal disease is propionyl L-carnitine.

19. (Previously Presented) Method according to claim 15, in which said composition can be administered by the parenteral or vaginal routes.